

531, 351

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



15 APR 2005

(43) International Publication Date  
29 April 2004 (29.04.2004)

PCT

(10) International Publication Number  
**WO 2004/035760 A2**

- (51) International Patent Classification<sup>7</sup>: **C12N** d'Orques (FR). ROTT, Philippe [FR/FR]; 3 rue Paul Cézanne, F-34830 Clapiers (FR).
- (21) International Application Number: **PCT/US2003/033142** (74) Agents: ELISENSCHENK, Frank, C. et al.; Saliwanchik, Lloyd & Saliwanchik, 2421 NW 41st Street, Suite A-1, Gainesville, FL 32606-6669 (US).
- (22) International Filing Date: 17 October 2003 (17.10.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/419,463 18 October 2002 (18.10.2002) US
- (71) Applicants (for all designated States except US): UNIVERSITY OF FLORIDA [US/US]; Office of Technology Licensing, P.O.Box 115500, Gainesville, FL 32611-5500 (US). CENTRE DE COOPERATION INTERNATIONALE EN RECHERCHE AGRONOMIQUE POUR LE DEVELOPPEMENT (CIRAD) [FR/FR]; 42 rue Scheffer, F-75116 Paris (FR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): ROYER, Monique [US/US]; 61, rue de Gascogne, F-34090 Montpellier (FR). GABRIEL, Dean, W. [FR/FR]; 5519 N.W.91st Blvd., Gainesville, TX 32653-5117 (US). FRUTOS, Roger [FR/FR]; 1, rue des Alicantes, F-34680 Saint Georges
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**  
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: COMPLETE BIOSYNTHETIC GENE SET FOR SYNTHESIS OF POLYKETIDE ANTIBIOTICS, INCLUDING THE ALBICIDIN FAMILY, RESISTANCE GENES AND USES THEREOF

(57) Abstract: Three gene clusters that together encode albicidin biosynthesis, the complete gene DNA sequences, and the deduced protein sequences for the enzymes and methods for using the DNA sequences are disclosed and discussed as well as methods for plant protection and creating new antibiotics. The novel Albicidin family of antibiotics is disclosed and their structure deduced.

WO 2004/035760 A2